

1
3
5
7
9
11
13
15
17
19
21
23
25
27
29
31
33
35
37
39
41
43
45
47
49

CLAIMS

What is claimed is:

1. A process for generating computer flight plans on the Internet comprising the elements of:

- a) a raw XY&Z database of chart data;
- b) a data base containing aircraft data;
- c) a software system to create VFR, IFR and Road charts;
- d) an Internet web site accessible by a Client computer;
- e) a software system which computes flight plans requested by means of the Internet web site Client computer;
- f) a software system which allows for navigation data and aircraft editing by means of the Internet web site Client computer; and a software system which allows for outputting flight plans by means of the Internet web site Client computer.

2. A process for generating computer flight plans on the Internet as claimed in claim 1 further comprising the steps of compiling a data base containing topographical data in the form of X,Y, and Z axis coordinates and process for of creating Background images (charts) which are color coded according to elevation using a software system and further generating relief chart shading by use of a software system in which said charts are shaded according to elevation and illumination angle.

3. A process for generating computer flight plans on the Internet as claimed in claim 1 further comprising the step of compiling a data base containing navigational data, obstruction data

1 and other chart feature data in the form of X,Y, and Z axis
3 coordinates and of merging topographical, navigational and Road data
5 into one image (chart) by means of a software system.
7

9 4. A process for generating computer flight plans on the
11 Internet as claimed in claim 1 further comprising the step(s) of
13 placing text and other textual chart description in such a way as not
15 to overwrite one text element with another.
17

19 5. A process for generating computer flight plans on the
21 Internet as claimed in claim 1 wherein said element comprise a data
23 base of rasterized charts consisting of pre-defined scales and chart
25 features and a data base of routes consisting of pre-defined waypoint.
27

29 6. A process for generating computer flight plans on the
31 Internet as claimed in claim 1 wherein said elements include a local
33 area network consisting of a service and number of local Client
35 computers or an Intranet network which is connected by means other
37 than wires such as infrared or radio signals
39

41 7. A process for generating computer flight plans on the
43 Internet as claimed in claim 6 further comprising the step(s) of
45 computing by means of a software systems a cross section of the flight
47 plan and displaying same in a profile window in which the route is
49 displayed relative to terrain elevation, obstruction elevation,
airspace, weather and flight altitude.

1
3 8. A process for generating computer flight plans on the
5 Internet comprising the steps of utilizing an Internet Server web site
7 software by means of:

9
11 9. A process for generating computer flight plans on the
13 Internet as claimed in claim 8 further comprising the step of
15 selecting the desired chart by means of an Internet web site software
17 system which compiles the desired charts tiles requested by the Client
19 computer.

21 10. A process for generating computer flight plans on the
23 Internet as claimed in claim 8 further comprising the step(s) of
25 facilitating chart scrolling and chart viewing without refreshing the
27 entire Client computer display by means of a software system served by
29 an Internet web site.

31 11. A process for generating computer flight plans on the
33 Internet as claimed in claim 8 further comprising the step(s) of
35 prompting and managing the required flight planning parameter by means
37 of an Internet web site software which resides on the Server such
39 flight planning variables inputted and requested by the remote
41 computer.
43

45 12. A process for generating computer flight plans on the
47 Internet as claimed in claim 8 further comprising the steps(s) of
49 computing by means of a software system the computed flight plans
requested using the Internet web site remote computer.

1 13. A process for generating computer flight plans on the
3 Internet as claimed in claim 8 further comprising the step(s) of
5 overlaying routes and waypoints by means of a software system on the
7 desired chart.
9

11 14. A process for generating computer flight plans on the
13 Internet as claimed in claim 8 further comprising the steps of filing
15 flight plans by means of a software system through the use of the
17 Internet web site remote computer and the steps of printing reports by
19 means of a software system through the use of the Internet web site
21 Client computer.
23

25 15. A process for generating computer flight plans on the
27 Internet as claimed in claim 8 wherein said steps of facilitating
29 navigation data entry and editing by means of a software system of the
31 Internet web site remote computer and further facilitating the entry
33 and editing by means of a software system, aircraft performance data
35 editing through the use of the Internet web site Client computer.
37

39 16. A process for generating computer flight plans on the
41 Internet as claimed in claim 8 wherein said step provides for overlay
43 of graphical weather and textural data over the VFR, IFR, or Road
45 chart along with the route line and waypoints on the Internet web site
47 Client computer.
49

17. A process for generating computer flight plans on the
Internet as claimed in claim 8 wherein said step includes the process

1 by which route waypoints are selected based on topographical,
3 navigational, weather, geopolitical, airspace, and aircraft
5 performance constrains.
7
9
11
13
15
17
19
21
23
25
27
29
31
33
35
37
39
41
43
45
47
49